

Maternal death as a public health emergency: integrating MDSR into existing surveillance in Ethiopia

Evidence for Action-MamaYe was established in 2011 with UK aid from the UK government and continues with funding from the Bill & Melinda Gates Foundation. Our goal is to save maternal and newborn lives in Africa, through better resource allocation and improved quality of care.

This case is an excerpt from a collection of 22 case studies based on the experiences of the E4A-MamaYe programme, which brings to light new learning about the specific ways in which evidence, advocacy and accountability reinforce each other to bring about change.



Trainee Nurses

As part of its drive to tackle maternal mortality, the Federal Ministry of Health (FMoH) launched Ethiopia's Maternal Death Surveillance and Response (MDSR) system in May 2013, introducing the national MDSR Guidelines and conducting the first Training of Trainers workshop. This practical 'hands on' training was later cascaded down to the regional, zonal and woreda (district) levels. Alongside the Ethiopia World Health Organization (WHO) office, the Ethiopia country team was instrumental in developing the national tools and guidelines and designing the package of training materials used to extend coverage throughout the country.

Description of the case

By the end of 2014, the MDSR system had been introduced in 17 zones, covering roughly 40 million people out of an estimated total national population of 95 million. Maternal deaths became the 21st mandatory reportable condition within the

country's Public Health Emergency Management (PHEM) system, which roughly equates to what is referred to as Integrated Disease Surveillance and Response in other contexts. PHEM is delivered through the Ethiopian Public Health Institute (EPHI), responsible for active surveillance and response of critical diseases and events. The inclusion of MDSR within PHEM thus indicates the high level political prioritisation of maternal mortality.

As over 80% of maternal deaths occur outside of facilities, the MDSR system is structured around community-based identification and notification of maternal deaths. Health extension workers at the frontline are expected to alert their local health centre when any death or a woman of reproductive age meets screening criteria for potential maternal causes. The health centre PHEM surveillance officer then conducts a verbal autopsy with family members to assess the circumstances leading to the woman's death.

A review committee meets monthly and discusses cases, identifies avoidable causes, sets an action plan, and sends summary data up the system. Further data aggregation and review occur at each level, and case-based information is also reported directly to EPHI, which maintains the national database and will analyse findings for presentation to the FMoH MDSR task force and national expert committee. Although facilities are also expected to identify and review deaths, take action to improve quality of care based on each case, and report to

the regional health bureau, the community-based verbal autopsies remain the focus of the system and are required for each suspected maternal death, regardless of its location.

Results

Currently, seven of the nine regions have implemented MDSR training programmes and are working towards full coverage and reporting. By June 2015, 299 deaths had been reported up to national level, representing over 10% of expected maternal deaths in those areas where the system has been initiated. This proportion will continue to increase as the system becomes more established.

Examples of improved quality of care in hospitals, enhanced communication between levels of the health system and increased awareness of maternal deaths and how to prevent or mitigate against them have emerged. In one hospital, for instance, two serious cases of eclampsia occurred within 14 days of each other. Following the death of the first woman, the hospital MDSR committee recommended more rapid consultation with senior staff, and purchased a generator and biochemistry machine. When the second woman arrived, unconscious and with abnormal body movements, staff recognised the similarities and all resuscitative measures were conducted, with senior attendance by an emergency surgical officer, gynaecologist and internist.

Challenges and lessons learned

The integration of the nascent MDSR system into established PHEM procedures has proved challenging. First, disseminating the new reporting forms to 30,000 health extension workers is logistically onerous, and many areas of the country have not yet received the requisite materials nor undergone training on the addition of maternal death to their surveillance responsibilities. Furthermore, as maternal deaths are not infectious and do not pose the same level of immediate threat such as measles or polio outbreaks, PHEM resources (including staff and transport) are regularly diverted elsewhere.

The current focus is on streamlining the integration of MDSR and PHEM so that maternal deaths are routinely reported and analysed at each level with a concerted focus on the actions and responses resulting from the findings. A large national training programme is underway to ensure the new tools and protocols are introduced throughout the country. Our efforts are focused on strengthening data flow, management and presentation in useful formats, supporting regional-level committees in identifying policy responses, and assisting health facilities in the use of MDSR as an opportunity for initiating quality improvement measures.

This case study is based on the observations and programme knowledge of our staff and of the national MDSR Technical Working Group in Ethiopia.

To read the collection of E4A case studies visit: www.mamaye.org/en/evidence/mamaye-evidence-action-stories-change-selected-case-studies

